## 38. Batrachoides beninensis, sp. n.

Depth of body about 6 in length, length of head about 3 . Diameter of eye 10 to 12 in length of head. A horizontal fold of skin from below eye to praperculum. Two opercnlar and two subopercular spines. Teeth on vomer and palatines uniserial, obtusely conical; 11 to 13 on vomer; lower jaw with a series of similar teeth and anteriorly a patch of villiform teeth : premaxillaries with a narrow band of villiform eeth. Head naked, covered with small filiform papillæ; no scales on ncciput or on throat; snout and lower jaw with fringes. Body scaly, the scales comparatively large, 10 between origin of second dorsal and lateral line. Dorsal III, 25. Anal 22-23. Pectoral 19-20, extending to origin of anal; no axillary foramen or pores. Greyish; head ormamented with irregular transverse dark bands with darker edges ; body with irregular dark cross-bars and spot: ; dorsal and anal fins with oblique stripes; pectoral with series of spots; caudal dark at the base and also posteriorly.

Three specimens, 160 to 210 mm . in total lenyth.
Related to B. surinamensis, Schneid., of the Atlantic coast of America, differing especially in the completely naked head, the larger scales, and the fewer dorsal and anal rays.

> VI.-Ants from North and Central Australir, collected by G. F. Hill.-Part I. By W. C. Crawley, B.A.

## 1. Subfan. Ponerinze.

No. 2. Odontomachus ruficeps, Sm., subsp. acutidens, Forel.
Darwin, N.T., 15. iv. 13. $\wp$.
No. 21. Odontomachus septentrionalis, sp. n.
ஒ.-L. 14.8 mm . (with mandibles).
Mandibles long ( 2 mm .), dentate all along their inner margin ; apical tooth long, rounded at point, subapical very small and pointed, preapical nearly as lung as apical, broad and truncated. Head 3.5 mm . long, maximum breadth 2.5 mm ., minimum (at back) 1.8 mm . Frontal area distinct ; clypeus long, prolonged to a point between the frontal carinæ, anterior border truncate. Head much narrower behind and deeply emarginate. Node of pedicel very high, merging.
insensibly into a long spine. The anterior portion underneath hears a broad tooth slightly inclined backwards.

Head finely striated, the melial striee lon pitudi al, the lateral ones diverging round the back of head. Frontal carine with a few longitudinal strix. Mandibles smooth and shining, a few deep punctures along the outer curve of the apical tooth and at the base of the preapical, and smaller ones along the rest of the mandibles. Pronotum coarsely striated circularly, mesonotum with finer transverse strite, epinotum coarsely striated transversely. The lower tivothirds of node encircled with fine striæ. Gaster smonth and shining; the lower quarter of first segment, and the seend and third segments, finely reticulate-punctate. A few scattered hairs on mandibles, head, epinotum, gaster, and underside of tibiæ. Legs and antennæ pubescent.

Dark brown; head, antenne, and legs dark red.
One $\begin{gathered} \\ \text {. Stapleton, N.'T', 21. xii. } 12 .\end{gathered}$
Nos. 33 and 84. Rhylidoponera (s. str.) hilli, sp. n.

## ช.-L. $8 \cdot 0-85 \mathrm{~mm}$.

Mandibles striate, feebly and indistinctly dentate. Second joint of fimiculus longer than the first, and about twice as long as broad. Clypeus coarsely rugose, with a slight central ridge. Head slightly conves at sides, somewhat wider in front than behind, where it is emarginate; slightly humped behind the eyes. Eyes very convex, placed just behind the middle of sides. The posterior angles are accentuated, but do not form distinct bosses. 'Thorax convex, sutures marked by two transversal impressions, but there is no emargination. Pronotum with a smali tooth at the inferior angles. Node of pedicel high and rounded, somewhat compressed before and behind, wider than long, thicker at base than apex. Claws with one tooth.

Whole of head, except mandibles, deeply punctured with circular shining punctures, finely reticulate between the punctures; the vertex has a few longitudinal striæ. Pedicel finely striated transversely and sparsely punctured. The striæ on first segment of gaster fine and arched; second segment transversely fincly striated. A scattered indistinct punctuation on whole of gaster. Pilosity almost nil ; a few upright hairs on tibia.

Dark brown; head and thorax almost black; legs and funiculi reddish brown, base of gaster pale.

Stapleton, N.T., 1. v. 13.

No. 21óc. Rhylidoponera (s. str.) incis r, sp. n.
ช.-L. 10-10.5 mm.
Mandibles striate, feebly and irregularly dentate. Frontal area very distinct, triangular. Head somewhat longer than broad, feebly convex at sides, with a small oblong impression on the vertex. Eyes very convex, placed behind the centre of sides. Posterior angles of head formed into blunt points. Thorax convex, sutures distinct. Pronotum with a small tooth at each inferior angle. Node of pedicel romnded, broader than long, notched at the top. Claws with one tooth.

Clypeus feebly rugose and finely reticulate ; front and vertex longitudinally rugose, the ridges spreading fanwise to the posterior angles of the head, leaving a space between not ugose; checks near base of mandibles somewhat rugose. Head, thorax, and pedicel with shallow irregular punctures; whole of body and legs finely reticulate, the reticulation extending to the bottom of the punctures. Antemal scapes and tarsi longitudinally striate ; a few punctures on coxæ and very indistinct ones on first segment of gaster.

Pilosity almost nil ; stiff hairs along the tibiæ and a few under the coxa and femora.

Dull black; mandibles, legs, and antennæ dark reddish brown, apical joints of funiculi and tarsi dull red.

Alice Springs, Central Australia, 1913.
No. 30. Rhytidoponera (? Chalcoponera) dulia, sp. n.

## ชุ.-L. 4.6 mm .

Mandibles triangular, finely striate, with minute teeth, apical tooth long and pointed. Clypeus feebly arched at anterior border, with a median ridge reaching to the posterior border, the latter narrowly rounded between the frontal carine. Frontal carinæ wide apart in front, converging slightly behind the lobe, then parallel. Frontal area not very distinct. Eyes large (larger than in metallica), hemispherical, placed slightly behind the middle of sides of head. Head longer than broad. First joint of funiculus as long as the second, which is less than twice as long as broad; funiculus slighly thicker at apex, but not clubbed. The seapes extend slightly beyond the occipital border. Head longer than broad, very slightly convex at sides, emarginate behind. Thorax slightly convex, at each inferior angle of prothorax is a small tooth ; pro-mesonotal suture distinct, breaking the sculpture, suture meso-epinotal almost entirely effaced. Node of pedicel rounded, slightly longer than broad, under-
reath bears a long perpendicular spine. Spurs of the two prsterior pairs of tibie very small and simple. Claws with a single tooth each side. The first (or post-petiole) and second segments of gaster of about equal length, the constriction between them fairly deep.

Head, thorax, and node of pedicel coarsely punctured with shining circular punctures (not coarsely wrinkled as in metallica) ; a few coarse strix from the frontal area to vertex. Gaster shining, first segment and anterior half of second sparsely punctured, but not so deeply as thorax.

Pilosity almost nil; a few scattered hairs on antennæ, legs, and segment of gaster, the remaining segments ringed with sharp ontstanding lairs.

Reddish, with a very slight metallic tinge; mandibles, antemme, and legs paler.

Stapleton, N.T., 23. xii. 12.
A single $\begin{array}{r}\text { in a tube containing Euponera (Brachyponera) }\end{array}$ lutea, Mayr., var. clara. Under a magnification of 100 diameters the spurs on the posterior tibiæ show no signs of pectination.

> No. 30. Euponera (Brachyponera) lutea, Mayr., var. clura, var. n.

ఛ̧.-L. 4.5 mm .
Slightly smaller and more elongate than lutea, the mandibles not so deeply punctured, and epinotum rather narrower in front; spurs of middle pair of legs very sparsely pectinate, as in luter. Gaster more elongate.

Pale chestnut-yellow, sometimes top of head, prothorax, and epinotum slightly darker.

Stapleton, N.'I'., 23. xii. 12.
No. 19. Cerapachys (Syscia) australis, For.
Darwin, N.T., 1. iv. 13. ஒ̧.

## No. 25. Platythyrea parva, sp. n.

ซุ.-L. $3.7-4 \mathrm{~mm}$.
Mandibles finely reticulate-punctate, with one or two larger punctures, armed with eleven irregular teeth, the apical and preapical longer. Clypeus fairly convex, with a subacuminate lobe in front; lateral margins barely visible, posterior clearly marked. Frontal area indistinct. Eyes medium size, placed well in advance of the middle of sides. Head longer than broad, slightly narrower in front; sides
somewhat convex ; emarginate behind; a faint ridge from behind the frontal area to the occiput. The scapes of the antemae exactly reach the occiput ; joints $3-10$ of funiculns as broad or broader than long. Suture pro-mesonotal deeply marked. The declivous face of epinotum with sharp angles absee, bordered. Posterior coxæ with a lamellate tooth. Nole of pedici] three-quarters as wide as long, slightly narrower in front, truncate behind. Cunstriction between first and second segments of gaster slight. The whole body fincly punctured and minutely reticulate.

Pilosity nil, except the ring of hairs round the apical segments of gaster. The whole insect covered with a fine pruinose pnbescence.

Black-brown ; mandibles, antennæ, tibix, tarsi, articulations of legs, and apex of gaster reddish yellow.

Darwin, N. I', 1. iv. 13.
No. S1. Diucamma austraie, F., var. levis, var. n.
ฤ̧. -L. 11 mm .
Sriation on head, thorax, and pedicel much finer than in aus'rule, that on the head concealed by the pubescence. First two segments of gaster not striate, but the first very feebly reticulate, the second still more feebly. Hore pubescent than australe.

Near Adelaide Plains, N.T., 1. vi. 13.

## III. Subfam. Myrificinct.

No. 24. 'Trig'yplhothrix striatidens, Eur., var. australis, For.
Somewhat smaller than the typical striatidens from India. Darwin, N.T., 1913. ซ઼.

No. 23. Monomorium rothsteini, For.
N.T., 30. v. 13. ४̧.

No. 426. Monomorium rothsteini, For.
Darwin, N.T., 17. iii. 14. ㅇ ¢
No. 425. Monomorium (Mitara) donisthorpei, sp. n. ஒ.-L. 1.7 mm .
Mandibles tridentate, smooth, and shining. Clypeus without tecth, with two carine widely divergi ig in front. Head oval-rectangular. Eyes large, slightly in adra ce of the midule of sides. Anternæ 11-jointed; joint 2 of funiculus
slightly longer than broad, joints $3-5$ as broad as long. Club 3-jointel, the terminal joint longer than the other two together. The scape does not quite reach the posterior margin of the head. Pro-mesonotnur regularly arched, without suture; the emargination between the meso- and epinotum deep. Epinotum unarmed. First node of pedicel high, slightly broader at base than at top; second slightly lower and broader.

Smooth and shining; a few strix on the lower part of sides of meso- and epinota. Body with scattered whitish upright hairs. Antenuæ hairy.

Black-brown; mandibles, tarsi, and articulations of legs paler.

Durwin, N.T., 10. ii. 14.


Profile view of thorax and pedicel of Monomorium (Mitara) donisthorpei.

No. 26. Solenopsis geminata, F., var. rufu, Jerd.
The typical geminata, F., is the American form. The var. rufa, Jerd., the Indo-Malayan form, is cosmopolitan, and distinguished by its lighter colour and the presence of a small tooth on each side between the prosternum and mesosternum. It has heen recorded from Celebes.

Darwin, N.T., 17. iv. 1.3. ซ઼ $\psi$.

## IV. Subfam. Dolichoderivet.

No. 17. Iridomyrmex rufuniger, Lowne, subsp. pallidus, For.
Darwin, N.T., 17. vii. 13. $\wp$.
No. 424. Iridomyrmex nitidus, Mayr.
Melville Island, N.'T., 14. iv. 1t. ఫ̧.
V. Subfam. Camponotinee.

No. 16. Opisthopsis haddoni, Em.
Point Charles, N.T., 14. viii. 13. ৮઼.

No. 29. Camponotus (Myrmoturba) villosa, sp. n.

## ఫ.-L. $9-12.5 \mathrm{~mm}$.

In the $\wp$ major the clrpeus is carinate and fcebly and widely emarginate ; mandibles 7 -dentate, finely reticulate, with scattered piligerous points; scapes just reach the occiput. Declivous surface of epinotum half as long as basal surface. Scale high, narrow. In the ơ minor mandibles 6-dentate, clypeus carinate, anterior border straight; scale similarly shaped, but broader and lower. Whole body very finely reticulate, more feebly on gaster, and $\succcurlyeq$ minor less than $\begin{array}{r}\text { o major. }\end{array}$

Scapes and tibix hairy ; the whole body with long scattered outstanding hairs. Yellow; head, mandibles, and gaster of of major chestnut, darker, with a still darker patch on the vertex, joints of legs also darker ; bases of first, second, and third gastric segments yellow ; $\wp$ minor entirely y lllow, sometimes top of head and gaster slightly darker.

Batchelor, N.T., 12. xii. 12.
No. 87. Camponotus (Myrmoturba) maculatus, F., subsp. norce-hullundice, Mayr.
Batchelor, N.'T'., 12. xii. 12. 千̧ major and minor.
No. 215. Camponotus (Nyrmosphyma) wiederkehri, For., var. lucidior, Hor.
of (not yet described).-L. 16 mm .
Clypens more convex in centre, head slightly narrower, altogether darker in colour, with the yellow border to the base of the first three segments of gaster more pronounced than in the of major, but otherwise similar except for the sexual differences.

Alice Springs, Central Australia. ot of $\begin{gathered}\text {. }\end{gathered}$
No. 82. Camponotus (1Hyrmocamelus) ephippium, Sm.
Batchelor, 12. xii. 12. $\ddagger$.
No. 83. Calomyrmex albertisi, Em.
Batchelor, N.T., 23. i. 13. ซ઼.

